

ISOTOP® DSD

Steel spring vibration isolators with integrated high-performance damping element

Design

ISOTOP® DSD steel spring vibration isolators consist of two spring plates with M10 internal thread and a cylindrical screw spring designed according to DIN EN10270-1: 2001. All DSD elements are cathoporesis coated, which guarantees high corrosion resistance. The core piece of these elements is the damping medium of special Sylomer®-HD material, which is exactly matched to the relevant characteristic curve of the spring. The material is permanently elastic and break-proof.

Field of application

ISOTOP® DSD steel spring vibration isolators are used for source and receiver isolation of all impact type machines, as well as for machines of which the operating point is within the resonance range or which can start rocking when traversing the resonance.

Examples:

- Block-type thermal power stations
- Compressors
- Rotating machines, motors, turbines
- Mobile equipment, emergency power units
- Centrifuges, pumps
- Plan tables, test beds, scales
- Vibrating tables, conveyors
- Transport storage of delicate goods

Required data for selection

- Total weight to be absorbed (operational weight)
- Number and location of points of support
- Centre of gravity
- Structural shape of the device (dimensions)
- Load direction (vertical - horizontal)
- Lowest parasitic frequency (rotational speed or number of strokes)
- Start-up behaviour of the motor (run-up time)

Advantages

- Construction height, diameter and connection thread are identical for all types, which guarantees exchangeability.



ISOTOP® DSD, KTL

- As a result of the open construction, the source is connected to the foundation point only via the spring. The spring element can oscillate in the horizontal plane without restriction.
- The spring is clearly visible, which allows checking of its condition without dismantling. The distance between spring coils is visible under load.
- Accessories, base plate and height adjustment are universally applicable for all types.
- The damping core is permanently elastic and break-proof
- High corrosion resistance is accomplished with cathoporesis coating

Our service

Make use of our know-how on questions about vibration technology. We will gladly consult you and will calculate tailor-made solutions for vibration isolation.

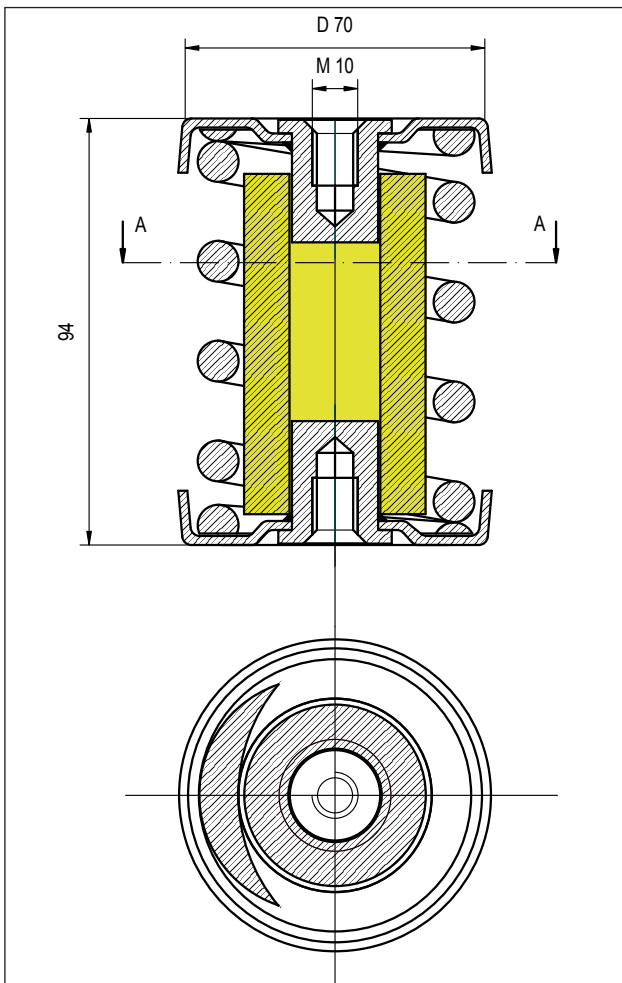
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Selection table

Description	Ref. no.	Nominal range (min. / max.)	Ideal load	Resonant frequency/damping (at approximately 24 mm deflection)
ISOTOP® DSD 1	450 000 61	120 N - 320 N	250 N	4,9 Hz / > 10%
ISOTOP® DSD 2	450 000 62	140 N - 400 N	370 N	4,5 Hz / > 10%
ISOTOP® DSD 3	450 000 63	270 N - 680 N	600 N	4,4 Hz / > 10%
ISOTOP® DSD 4	450 000 64	380 N - 1.000 N	900 N	3,9 Hz / > 10%
ISOTOP® DSD 5	450 000 65	580 N - 1.650 N	1.450 N	4,6 Hz / > 10%
ISOTOP® DSD 6	450 000 66	1.000 N - 2.500 N	2.100 N	4,0 Hz / > 10%
ISOTOP® DSD 7	450 000 67	1.100 N - 3.600 N	3.300 N	4,8 Hz / > 10%
ISOTOP® DSD 8	450 000 68	1.900 N - 5.700 N	5.300 N	5,1 Hz / > 10%

Figure

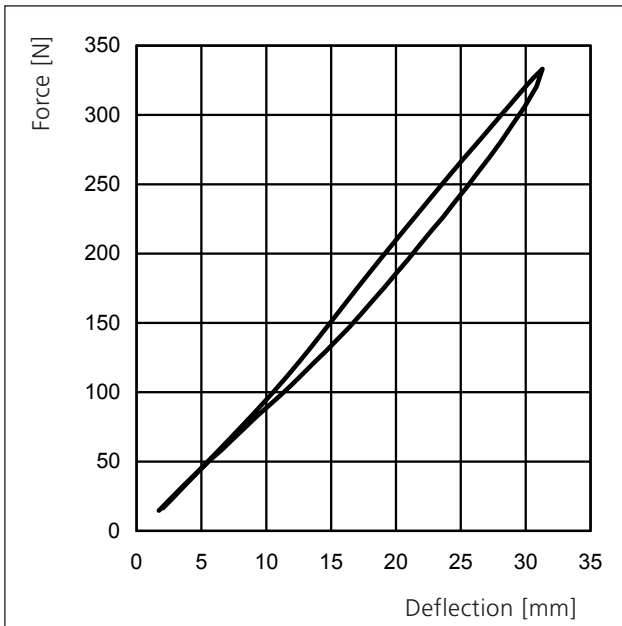


All data indicated are based upon our current knowledge. They may be used as calculation and standard values and are subject to the usual machining tolerances. Subject to change and correction.

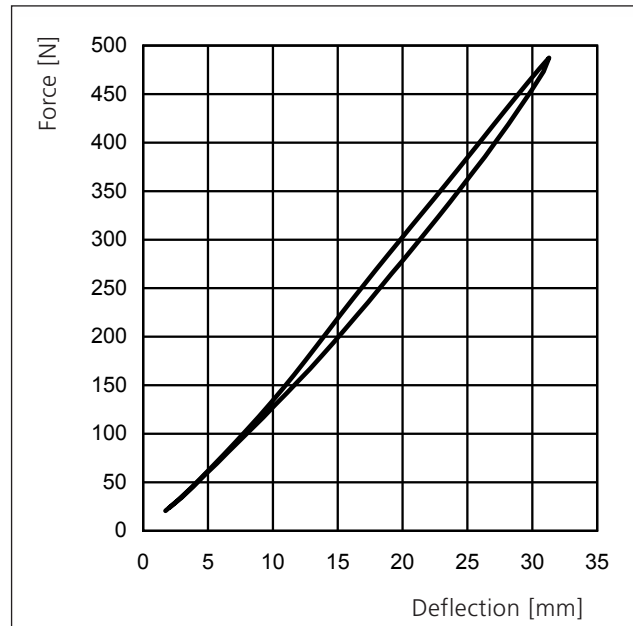
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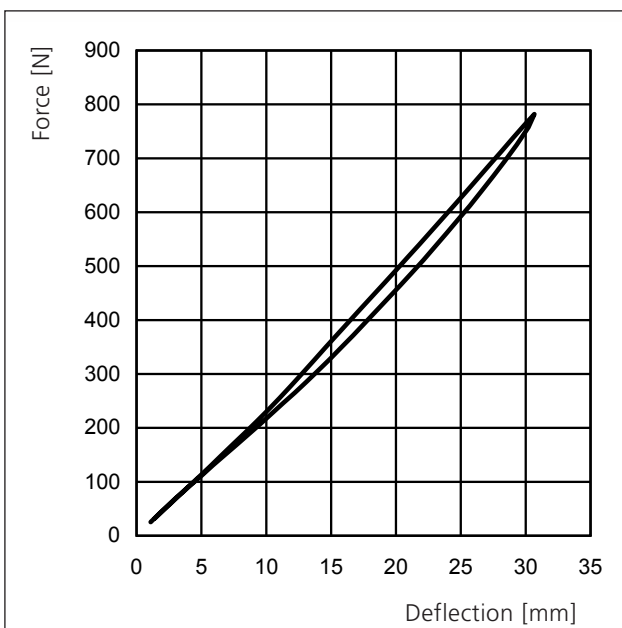
ISOTOP® DSD 1



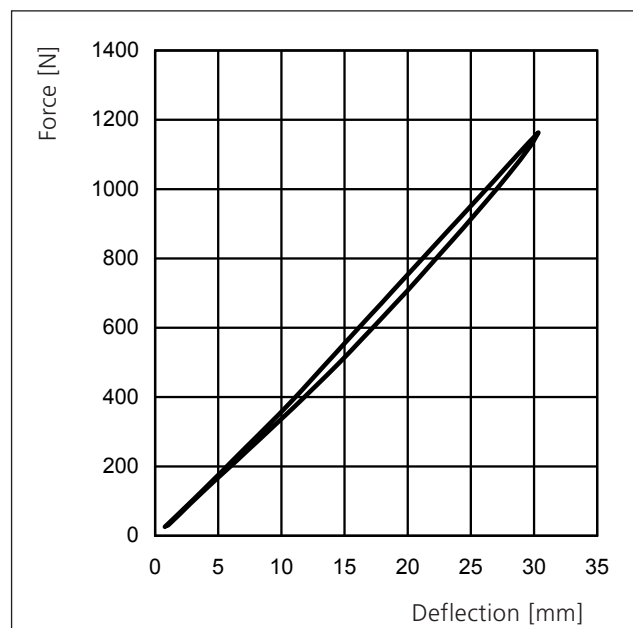
ISOTOP® DSD 2



ISOTOP® DSD 3



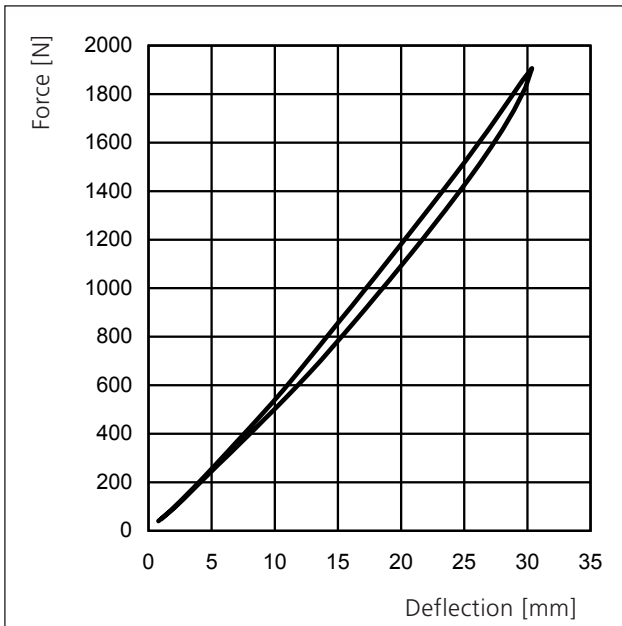
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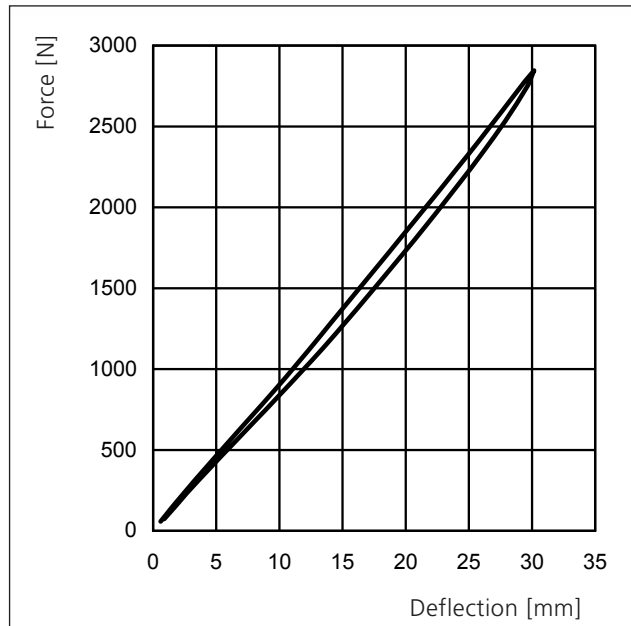
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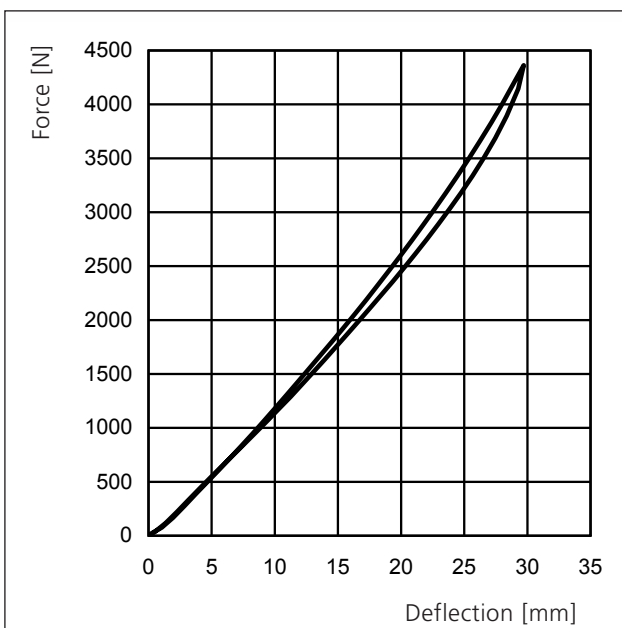
ISOTOP® DSD 5



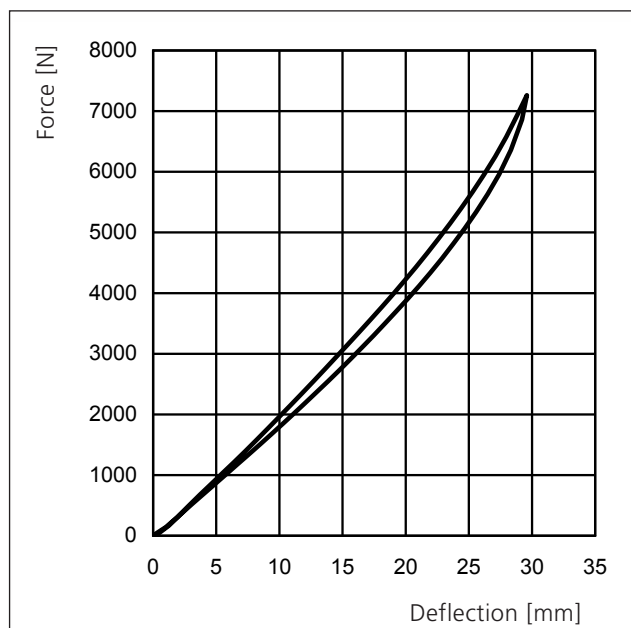
ISOTOP® DSD 6



ISOTOP® DSD 7



ISOTOP® DSD 8



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